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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/005,647  | 12/07/2001  | Markku Jalkanen      | 1708.0280002/MCA/MBT    | 9088             |
| 26111   | 7590        | 02/05/2004           | EXAMINER                |                  |
| STERNE, KESSLER, GOLDSTEIN & FOX PLLC<br>1100 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | PATTERSON, CHARLES L JR |                  |
|   |             |                      | ART UNIT                | PAPER NUMBER     |

1652

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/005,647

Applicant(s)

JALKANEN ET AL.

Examiner

Charles L. Patterson, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other:

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Restriction to one of the following inventions is required under 35

U.S.C. 121:

- I. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1 to 188 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- II. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1 to 119 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- III. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1 to 120 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- IV. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1 to 121 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- V. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 119 to 618 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- VI. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 120 to 618 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.

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- VII. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 121 to 618 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- VIII. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 122 to 618 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- IX. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 34 to 147 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- X. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 35 to 154 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- XI. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 34 to 154 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- XII. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1 to 154 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- XIII. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 155-618 of

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Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.

- XIV. Claims 1-11 and 15-18, drawn to a polynucleotide encoding a polypeptide at least 80% or 95% identical with amino acids 1-618 of Figure 3 and a method of increasing activity of C5-epimerase, classified in class 536, subclass 23.2.
- XV. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1 to 118 of Figure 3, classified in class 435, subclass 233.
- XVI. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1 to 119 of Figure 3, classified in class 435, subclass 233.
- XVII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1 to 120 of Figure 3, classified in class 435, subclass 233.
- XVIII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1 to 121 of Figure 3, classified in class 435, subclass 233.
- XIX. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 119 to 618 of Figure 3, classified in class 435, subclass 233.
- XX. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 120 to 618 of Figure 3, classified in class 435, subclass 233.
- XXI. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 121 to 618 of Figure 3, classified in class 435, subclass 233.

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- XXIII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 122 to 618 of Figure 3, classified in class 435, subclass 233.
- XXIII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 34 to 147 of Figure 3, classified in class 435, subclass 233.
- XXIV. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 35 to 154 of Figure 3, classified in class 435, subclass 233.
- XXV. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 34 to 154 of Figure 3, classified in class 435, subclass 233.
- XXVI. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1 to 154 of Figure 3, classified in class 435, subclass 233.
- XXVII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 155-618 of Figure 3, classified in class 435, subclass 233.
- XXVIII. Claims 12-14, drawn to a C5-epimerase polypeptide which is 95% identical with amino acids 1-618 of Figure 3, classified in class 435, subclass 233.

The inventions are distinct, each from the other because:

Groups (I-XIV) and (XV-XXVIII) are drawn to different chemical compounds that are patentably distinct. Each of the groups within (I-XIV) and (XV-XXVIII) are drawn to polynucleotides encoding polypeptide or polypeptides that have a given identity to different amino acid sequences in Figure 3 and are patentably distinct. Not only are the groups patentably distinct but

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each would require a separate and distinct search of the polynucleotide or polypeptide data bases.

It is noted that the SEQ ID NO of the polynucleotide and polypeptide sequences in Figure 3 are not given in the claims or specification but it is presumed that they are presumed to be SEQ ID NO:1 and 2, respectively.


Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Patterson, Jr., PhD, whose telephone number is 571-272-0936. The examiner can normally be reached on Monday - Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 571-272-0928. The fax phone number is 703-308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

  
Charles L. Patterson, Jr.  
Primary Examiner  
Art Unit 1652

Patterson  
January 29, 2004